

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
10 May 2002 (10.05.2002)

PCT

(10) International Publication Number  
**WO 02/36901 A1**

(51) International Patent Classification<sup>7</sup>: 19/02

**E04F 21/04,**

(74) Agent: HODGKINSON OLD McINNES; Level 3, 20 Alfred Street, Milsons Point, NSW 2061 (AU).

(21) International Application Number: PCT/AU01/01413

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(22) International Filing Date:

2 November 2001 (02.11.2001)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

PR 1215 3 November 2000 (03.11.2000) AU  
PR 5413 1 June 2001 (01.06.2001) AU

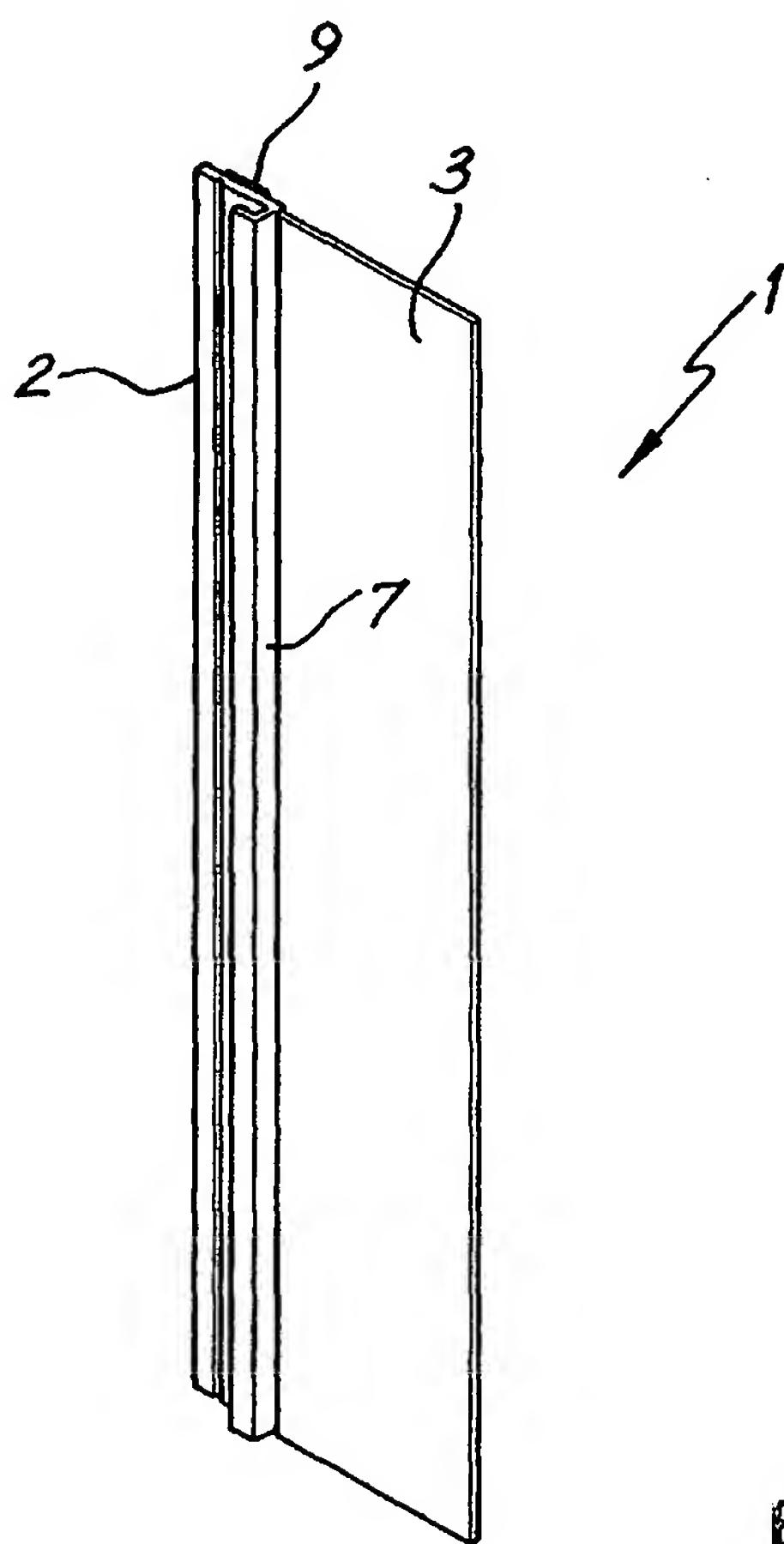
(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(71) Applicant and

(72) Inventor: COSLOVI, Fabio [AU/AU]; 14A Beaumaris Drive, Menai, NSW 2234 (AU).

[Continued on next page]

(54) Title: A BUILDING GUIDE STRIP



(57) Abstract: There is provided a guide strip (1) to assist in cement rendering around window frames and like openings. The strip (1) is the combination of two longitudinally extending portions (2, 3) joined in side-by-side relationship by a frangible part (4). The base strip (2) being one of these portions, is to be left in-situ within the render and has a render depth setting lip (6) extending from one side thereof alongside the frangible part (4). The window frame masking portion (3), being the remaining portion, can then be longitudinally snapped leaving only the base strip (2) embedded in the render. The strip (1) includes a connection means such as a ribbon 9 of double-sided adhesive to secure the base strip (2) to the window frame (12) prior to rendering.

**WO 02/36901 A1**

**BEST AVAILABLE COPY**

**Published:**

— *with international search report*

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

## A BUILDING GUIDE STRIP

### TECHNICAL FIELD

5 The present invention relates to building and, in particular, to the application of cement, plaster, texture coatings or other renders around window frames and like fittings in a building, and to the installation of cornices and like decorative fittings within a building.

### BACKGROUND

10

In many buildings the support columns or walls adjacent window frames are formed from brickwork, concrete or similar masonry structures which are load bearing. In order to position a window at its intended location, a timber or aluminum window frame is secured to the masonry. To provide an ascetically pleasing finished appearance, the masonry is then 15 rendered with cement, plaster or the like so as to form a smooth layer of render which hides any irregularities in the masonry. This layer should smoothly abut the window frame. However, the action of smoothing the render often results in render being applied to the window frame itself and/or the window frame being scratched by the tool used in the smoothing process. Furthermore, it is not unknown for some unscrupulous sub-contractors to 20 provide a very thin rendered layer which subsequently breaks because it is insufficiently strong.

In addition to the rendering process described above being time-consuming and requiring relatively highly skilled, and therefore relatively well paid, tradesmen, there is often a very 25 substantial cleanup required after the render has been applied. For example, render which has adhered to the window frame or window must be removed from the window frame or window. This often results in the window frame being scratched. Such scratches, or other scratches during the application of the render, often require the window frame to be touched up or repainted.

30

Furthermore, the render itself is normally painted once it is dried and this requires either great care on the part of the painter so as not to inadvertently apply paint to the window frame, or

considerable time must be spent in masking the window frame prior to the application of the paint.

### OBJECTS OF THE INVENTION

5

It is the object of the present invention to seek to reduce, or at least ameliorate, the abovementioned disadvantages by the provision of both a guide strip to assist in cement rendering around window frames and like openings, and also the provision of a method of cement rendering around window frames and like openings of a building.

10

It is a further object of the present invention to assist in and reduce the time required for the installation of cornices and like decorative fittings in a building.

### SUMMARY OF INVENTION

15

In accordance with a first aspect of the present invention there is disclosed a guide strip to assist in cement rendering around window frames and like openings, said strip comprising two longitudinally extending portions joined in side-by-side relationship by a frangible part, one of said portions comprising a base strip to be left in-situ within said render and having a render depth setting lip extending from one side thereof alongside said frangible part, the other of said portions comprising a window frame masking portion, and said strip including connection means to secure said base strip to said frame prior to rendering.

If desired, the masking portion can include a length of pliant sheet which can be temporarily adhered to the window of the window frame.

In accordance with a second aspect of the present invention there is disclosed a method of cement rendering around window frames and like openings of a building having a wall to which said frame is secured; said method comprising the steps of:-

30

- (a) securing the above defined guide strip to the frame with the depth setting lip extending away from the frame,

- (b) applying render to the wall adjacent the guide strip,
- (c) smoothing said render to be flush with the depth setting lip, and
- (d) breaking the frangible part to remove the masking portion of the guide.

5 Preferably, where the pliant sheet is also provided, it is removed simultaneously with the masking portion.

In accordance with a third aspect of the present invention there is disclosed a method of installing cornices, particularly between a ceiling and a wall formed from face bricks, timber

10 panels or the like, said method including the steps of:-

- (a) securing the above defined guide strip to said wall with the depth setting lip extending away from said wall and at a location on said wall that allows said lip to abut said cornice once said cornice is secured,
- (b) applying cornice fixing material either to said cornice or to regions on said ceiling and
- 15 the base strip of said guide strip to which said cornice is to be adhered,
- (c) securing said cornice to said ceiling and said base strip such that said cornice abuts said lip of said guide strip,
- (d) removing excess cornice fixing material from said ceiling and said guide strip, and
- (e) breaking the frangible part to remove the masking portion of the guide.

20

#### BRIEF DESCRIPTION OF THE DRAWINGS

Several embodiments of the present invention will now be described with reference to the drawings in which:

25 Fig. 1 is a transverse cross-sectional view of the guide strip of the first embodiment of the present invention;

Fig. 2 is a perspective view of the strip of Fig. 1,

Fig. 3 is a schematic perspective view of the guide strip of Figs. 1 and 2 with the masking portion in the process of being broken away from the base strip,

30 Fig. 4 is a schematic perspective view illustrating a masonry column to which a window frame is secured, the guide strip of Figs. 1-3 being secured to the window frame,

Fig. 5 is a view similar to Fig. 4 but illustrating the rendering process,

Fig. 6 is a view similar to Fig. 5 but illustrating the masking portion being broken away following completion of the rendering and painting,

Fig. 7 is a view similar to Fig. 1 but illustrating a guide strip of a second embodiment,

5 Figs. 8A-C are transverse cross-sectional views of a guide strip of a third embodiment showing the mechanism by which the guide strip attaches to a L-shaped skirting of a window frame,

Fig 9A is a view similar to Figs. 8A-C but illustrating the guide strip of the third embodiment once attached to an elongated block type skirting of a window frame,

10 Fig. 9B is a view similar to Fig. 9A but showing the guide strip of the third embodiment once attached to a semi-circular type skirting of a window frame,

Fig. 10 is a view similar to Fig. 1 but illustrating a guide strip of a fourth embodiment,

Fig. 11 is a view similar to Fig. 4 but illustrating a guide strip of the fifth embodiment,

Fig. 12 is a perspective view from the front of a guide strip of a sixth embodiment,

Fig. 13 is a rear perspective view of the guide strip of Fig. 10,

15 Fig. 14 is a side elevation of the guide strip of Figs 12 and 13,

Fig. 15 is a perspective view showing the use of the strip of Figs. 12-14,

Fig. 16 is a view similar to Fig. 1 but of a guide strip of a seventh embodiment,

Fig. 17 and 18 are each horizontal cross sections showing an installation including the strip of Fig. 16 after rendering, and

20 Figs. 19-21 are each an end elevation showing the application of the strip of Fig. 1 in relation to cornices.

#### MODES OF CARRYING OUT THE INVENTION

25 As seen in Figs. 1-3, the guide strip 1 of the first embodiment is preferably extruded from plastics material and takes the form of a base strip 2 and a window frame masking strip 3 which are arranged longitudinally in side-by-side relationship and joined by a frangible part 4.

The base strip 2 is provided with a rendered depth-setting lip 6 which has an outer surface 7  
30 flush with the frangible part 4. The base strip 2 also has a longitudinally extending groove 8 which assists in keying the base strip 2 and the render together. Additionally, the groove 8 can be scored with a knife and the base strip longitudinally snapped. This narrows the base

strip 2 for use in those circumstances where a thinner render depth is required. Alternatively, the base strip 2 can be fabricated in different sizes.

On the other side of the base strip 2 from the lip 6 is positioned a ribbon 9 of double-sided adhesive. One side of the ribbon 9 adheres to the base strip 2 and, as best seen in Fig. 4, the other side of the ribbon 9 is used to adhere the guide strip 1 to a window frame 12 which has been secured to a masonry column, wall or similar structure 13. As seen in Fig. 4 the guide strip 1 is adhered to the window frame 12 so that the edge of the base strip 2 remote from the masking strip 3 is substantially flush with the masonry 13. In situations where some movement is anticipated (eg high rise buildings), the ribbon 9 can include foam, rubber and like substances. Then the window can give slightly relative to the masonry.

Thereafter, as best seen in Fig. 5 a layer of cement, plaster or similar render 15 is applied to the masonry 13 and smoothed using an adjustable set square 16. As seen in Fig. 5, the set square 16 utilises the outer surface 7 of the lip 6 as a guide. This guide results in two aims being simultaneously achieved. Firstly, the depth of the render 15 is determined by the distance between the outer surface 7 of the lip 6 and the masonry 13. Thus, this distance can be assured to be at least a minimum distance, typically 10mm. In addition, the end of the set square 16 is moved over the surface of the masking strip 3 so that the set square 16 does not come into contact with, and thereby scratch, the window frame 12. As schematically illustrated in Fig. 5, a wooden trowel can, if desired, be used to provide a desired surface finish on the render 15. Again, the trowel 18 can use the outer surface 7 of the lip 6 and the masking strip 3 as guiding surfaces.

After the final condition of the render 15 has been achieved, the render 15 is allowed to set and can then, if desired, be painted to suit the final intended décor of the interior of the building. During the painting procedure, the masking strip 3 prevents any paint from being inadvertently placed on the window frame 12. Once the paint has dried, as schematically illustrated in Fig. 6 the masking strip 3 can be broken away from the base strip 2 by rupturing the frangible part 4. This leaves the base strip 2 embedded against the masonry 13 by the render 15 with only the outer surface 7 of the lip 6 and the broken edge of the frangible part 4 being visible. This portion of the lip 6 forms a narrow bead which provides a high definition

boundary between a window frame 12 and the render 15. Depending upon the colour used in the fabrication of the guide strip 1 and the colours of the window frame 12 and paint used to cover the render 15, the visible portion of the lip 6 can constitute either a high contrast boundary or an inconspicuous edge to the render 15. The embedded base strip 2 also acts as a 5 permanent barrier between the window frame 12 and the render and thereby inhibits the corrosion of metallic window frames that can otherwise gradually occur after render has set in direct contact with metallic window frames.

Fig. 7 illustrates in cross-section alternative guide strip 21 of a second embodiment in which 10 like portions relative to the guide strip 1 of Figs. 1-3 are marked with like numerals. The main difference between the guide strip 21 of Fig. 7 and the guide strip 1 of Fig. 1 is that the double-sided adhesive ribbon 19 is not used and instead a U-shaped flange 23 is provided. The U-shaped flange 23 opens towards that side of the base strip 2 opposite the lip 6. The U-shaped flange 23 enables the guide strip 21 to be pressed onto the aluminum window frame 15 12 and held thereon by means of a friction fit. Thus the double-sided adhesive ribbon 9 is not required. This results in a stronger keying action between the render and the base strip 2.

However, as many aluminum window frames are often bordered by skirting extending around the outside and inside edges of the window frame, the U-shaped flange 23 may not be of a 20 size and shape that facilitates a secure friction fit. A further alternative guide strip 31 of a third embodiment is shown in Figs. 8A-C and is adapted to ensure a secure connection between the guide strip 31 and a window frame 12 having an inwardly projecting L-shaped skirting 25 extending around the outside edge 26 of the window frame 12. This third embodiment depicted in Figs. 8A-C, as with all subsequent embodiments described below, is 25 again numbered such that like portions relative to the guide strip 1 of Figs. 1-3 are marked with like numerals. To replace the U-shaped flange 23 of the first embodiment, the guide strip 31 is provided with a resilient D-shaped flange 27 terminating with a foot 28 that projects away and is acutely angled to the base strip 2. The mouth region 29 of the D-shaped flange 27 is narrower than the width of the skirting 25.

30

Once the guide strip 31 is positioned against the window frame 12 as seen in Fig. 8A, the leading face 30 of the foot 28 of the untensioned D-shaped flange 27 is pressed against the

skirting 25. When the skirting 25 is run along the leading face 30 and pushed past the narrowest portion of the mouth region 29 of the D-shaped flange 27 as illustrated in Fig. 8B, the skirting 25 is captured within the flange 27 and presses against the roof portion 32 of the flange 27 to firmly secure the guide strip 31 to the window frame 12 as seen in Fig. 8C.

5

Fig. 9A illustrates that the guide strip 31 can still attach to a window frame 12 bordered by a skirting 35 having a more elongated shape in cross-section by the inner edge 33 that begins the leading face 30 of the foot 28 pressing against the skirting 35. In Fig. 9A, there are two points of contact between the D-shaped flange 27 and the skirting 25. However, the force 10 exerted by the tensioned D-shaped flange 27 at its inner edge 33 on the surface of the semi-circular type skirting 45 of the window frame 12 as illustrated in Fig. 9B is sufficient to secure the guide strip 31 to the window frame 12 without the need for a second point of contact between the flange 27 and the frame 12.

15 The D-shaped flange 27 of the guide strip 31 can be secured to a window frame 12 having a skirting of any shape or size provided that the skirting is not so wide that the flange 27 cannot be stretched so that the edge 33 of the flange 27 presses against the skirting 45. Similarly, the particular profile of the flange used to secure any of the above described guide strips to the window frame 12 need not be U-shaped or D-shaped, but instead can be any shape that 20 ensures a secure attachment of the particular guide strip to the frame 12. Further, the flange can be moulded to suit the specific contour exhibited by many commonly shaped skirtings found on window frames to provide a better friction engagement.

A fourth embodiment of a guide strip 36 is shown in Fig. 10 which differs from the strip 1 of 25 the first embodiment in that the longitudinally extending groove 8 is replaced with a kink 24. The kink 24 is more effective in keying together the base strip 2 and the render once set since the base strip 2 of the guide strip 41 presents a larger surface area available for contact with the render.

30 Turning now to Fig. 11, here a wooden window frame 42 is provided with a vertically extending groove 43. The guide strip 41 is provided with a barbed protrusion 44 which is

received in the groove 43 as a friction fit to retain the strip 41 relative to the frame 42. The remainder of the strip 41 functions as before.

A still further embodiment in the form of strip 51 is illustrated in Figs. 12-15. The strip 51 is 5 essentially as illustrated in Fig. 10 but is provided with a length of pliant sheet 52 which is preferably of the same length as the strip 51 and of any suitable width. The sheet 52 is preferably formed from flexible PVC sheeting which is inexpensive. The sheet 52 is adhered or otherwise attached to the masking strip 3. Ultrasonic welding, other fusing techniques, double sided adhesive strips, or glues are able to be used. The sheet 52 functions as an 10 extension of the masking strip 3 and is preferably held against the glass 53 of the window frame 12 by means of adhesive tape 54.

The effect of the sheet 52 is to entirely cover the window frame 12 and an adjacent peripheral region of the glass 53 from all splashes of render, paint etc, and all damage from inadvertent 15 scratching or damage from the tools of workers of all trades on a building site. After all actions such as rendering and painting have been completed, the masking strip 3 can be detached from the strip 51 and the sheet 52 simultaneously detached from the glass 53. Thus a neat finish is created.

20 As illustrated in Figs. 16-18, the base strip 2 can be modified to enable firstly the width of the base strip 2 to be adjusted. As seen in Fig. 16, the adjustment preferably takes the form of three longitudinally extending grooves 61. One of the grooves 61 can be scored with a knife and the base strip 2 longitudinally split to a desired width.

25 Secondly, the base strip 2 can be bent into various configurations as illustrated in Figs. 17 and 18 in order to bridge any gap between the window frame 12 and masonry 13. This assists in the rendering process by eliminating the need to insert a filler such as paper previously required to avoid render penetrating the wall cavity 60.

30 Turning now to Figs. 19-21, the building strip also finds application in the fixing of cornices. Where cornices are installed between a plasterboard wall and ceiling, any excess in the

material used to secure the cornice to the plasterboard is easily scraped from the plasterboard before the material has set.

However, where the wall is formed from face bricks, timber panels and the like, removal of  
5 the excess material is an extremely difficult job – particularly if the wall material is somewhat porous.

As indicated in Fig. 19, this cornice adhering material 65 is located along each edge of a cornice 66. A guide strip 1 is located on the wall 67 at a predetermined distance below the  
10 ceiling 68. Then the cornice 66 is installed resulting in excess material 65 being deposited on both the ceiling 68 and the guide strip 1 as indicated in Fig. 20.

As indicated in Fig. 21, the excess material 65 can be cleaned off the ceiling 68 and the strip  
1. Then the masking strip 3 can be broken away from the remainder of the strip 1 to leave a  
15 smooth clean edge and an unobtrusive addition to the lower edge of the cornice 66.

The right hand portion of Fig. 21 illustrates the use of the guide strip 1 in relation to a timber wall panel or timber feature frieze 69, or the like.

20 The foregoing describes only some embodiments of the present invention and modifications, obvious to those skilled in the art, can be made thereto without departing from the scope of the present invention. For example, although the guide strip of the various embodiments described above finds particular application to the sides of window frames, the invention is also applicable to the frames of prefabricated doors. The invention is particularly useful with  
25 texture finishes which have required window frames, etc. to be masked a first time, the finish applied, the first masking removed and then a second masking applied to permit the set finish to be painted. With the present guide strip, both masking tasks are eliminated.

30 The term “comprising” as used herein is used in the inclusive sense of “having” or “including” and not in the exclusive sense of “consisting only of”.

CLAIMS:

1. A guide strip to assist in cement rendering around window frames and like openings, said strip comprising two longitudinally extending portions joined in side-by-side relationship by a frangible part, one of said portions comprising a base strip to be left in-situ within said render and having a render depth setting lip extending from one side thereof alongside said frangible part, the other of said portions comprising a window frame masking portion, and said strip including connection means to secure said base strip to said frame prior to rendering.
- 10 2. The guide strip according to claim 1 wherein said connection means comprises a length of double-sided adhesive ribbon adhered by one side thereof to said base strip and having the other side thereof able to be secured to said frame.
- 15 3. The guide strip according to claim 1 wherein said connection means comprises a U-shaped flange extending along the edge of said base strip opposite said depth setting lip, said U-shaped flange opening towards the side of said base strip opposite to that from which said depth setting lip extends.
- 20 4. The guide strip according to claim 1 wherein said connection means comprises a resilient longitudinally extending hook opening towards the side of said base strip opposite to that from which said depth setting lip extends.
- 25 5. The guide strip according to claim 1 wherein said connection means comprises a barbed protrusion outwardly extending from the opposite surface of said base strip from which said depth setting lip extends.
- 30 6. The guide strip according to any one of the preceding claims wherein said base strip contains at least one groove.
7. The guide strip according to any one of the preceding claims wherein said base strip contains at least one kink.

8. The guide strip according to any one of the preceding claims wherein said window frame masking portion has a pliant cover sheet.

9. The guide strip according to any one of the preceding claims wherein said guide strip  
5 is used for the installation of cornices and like decorative fittings.

10. A method of cement rendering around window frames and like openings of a building having a wall to which said frame is secured; said method comprising the steps of:-

- (a) securing the above defined guide strip to said frame with the depth setting lip extending away from the frame,
- (b) applying render to said wall adjacent the guide strip,
- (c) smoothing said render to be flush with the depth setting lip, and
- (d) breaking the frangible part to remove the masking portion of the guide.

15 11. The method according to claim 10 including the further step of:-

- (a) adjusting the width and/or configuration of said base strip.

12. A method of fixing cornices, particularly between a ceiling and a wall formed from face bricks, timber panels or the like, said method including the steps of:-

- (a) securing the above defined guide strip to said wall with the depth setting lip extending away from said wall and at a location on said wall that allows said lip to abut said cornice once said cornice is secured,
- (b) applying cornice fixing material either to said cornice or to regions on said ceiling and the base strip of said guide strip to which said cornice is to be adhered,
- (c) securing said cornice to said ceiling and said base strip such that said cornice abuts said lip of said guide strip,
- (d) removing excess cornice fixing material from said ceiling and said guide strip, and
- (e) breaking the frangible part to remove the masking portion of the guide.

1/12

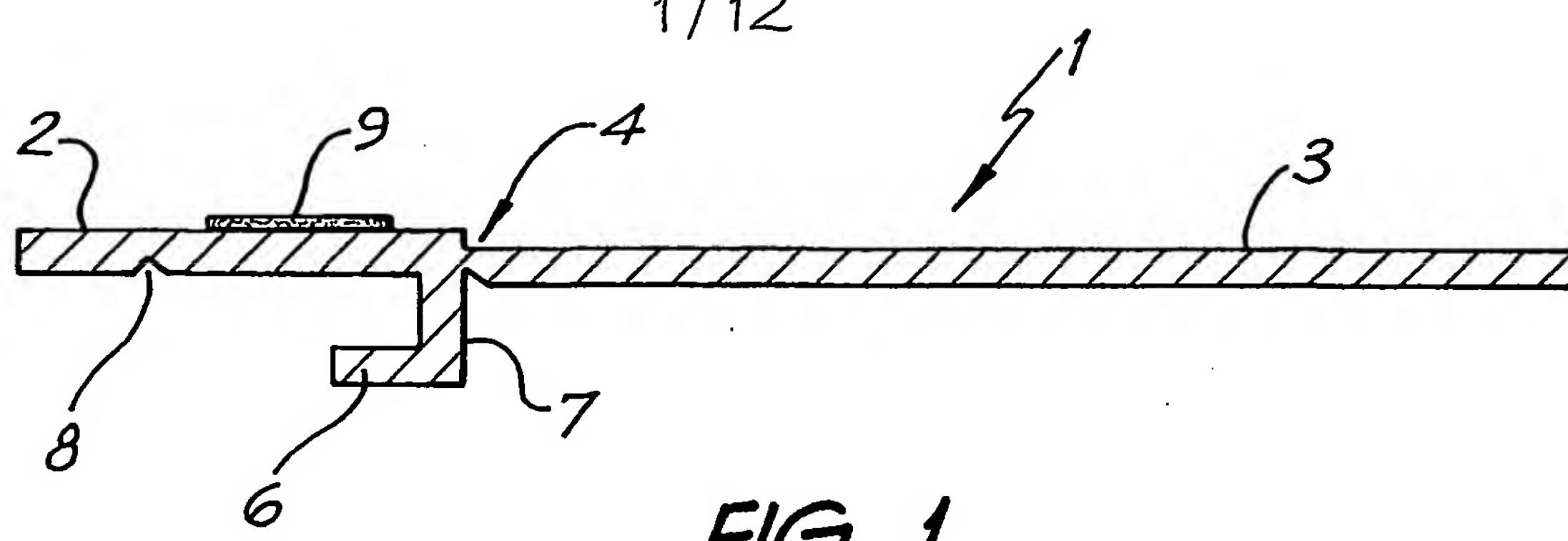


FIG. 1

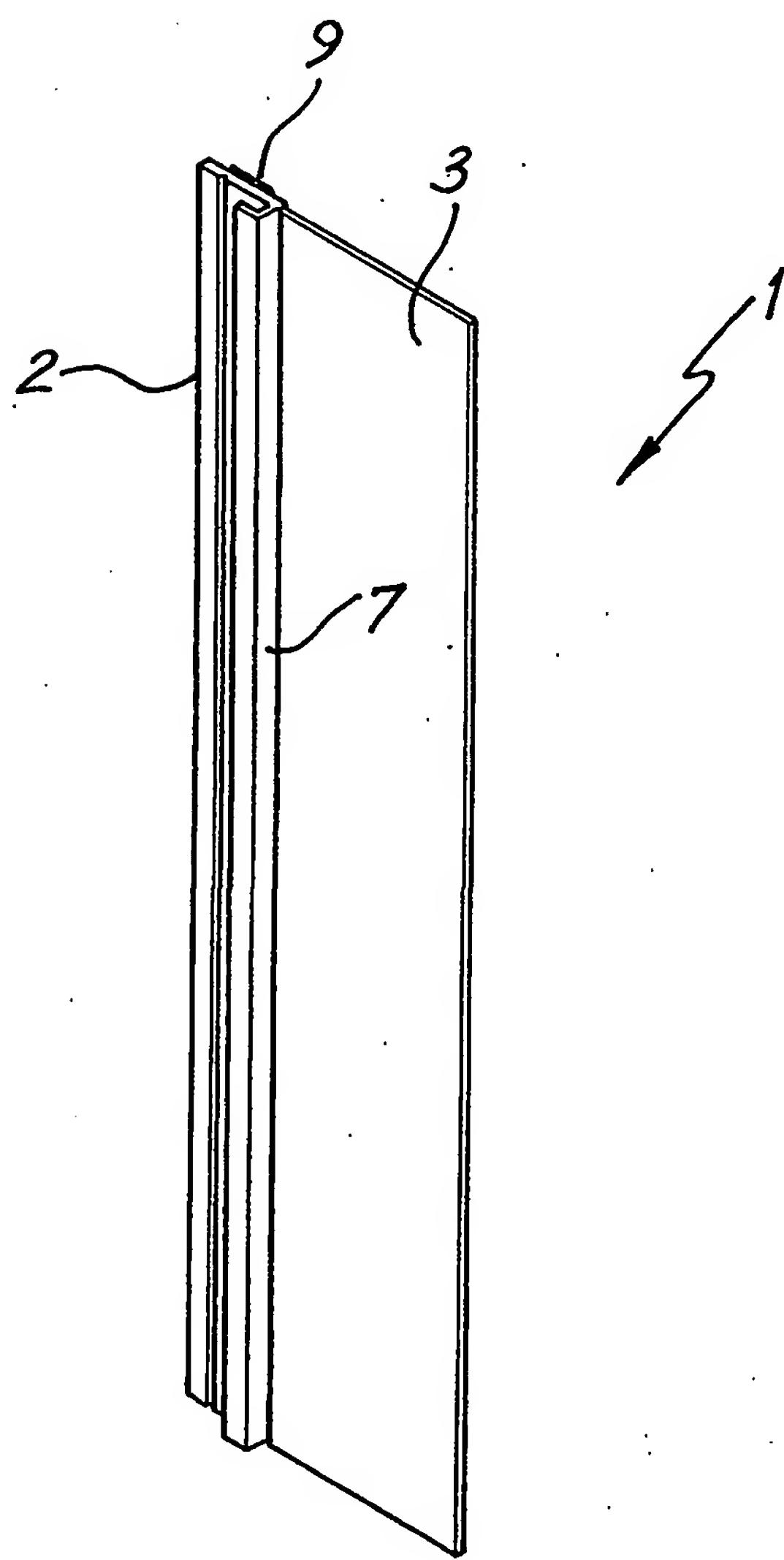


FIG. 2

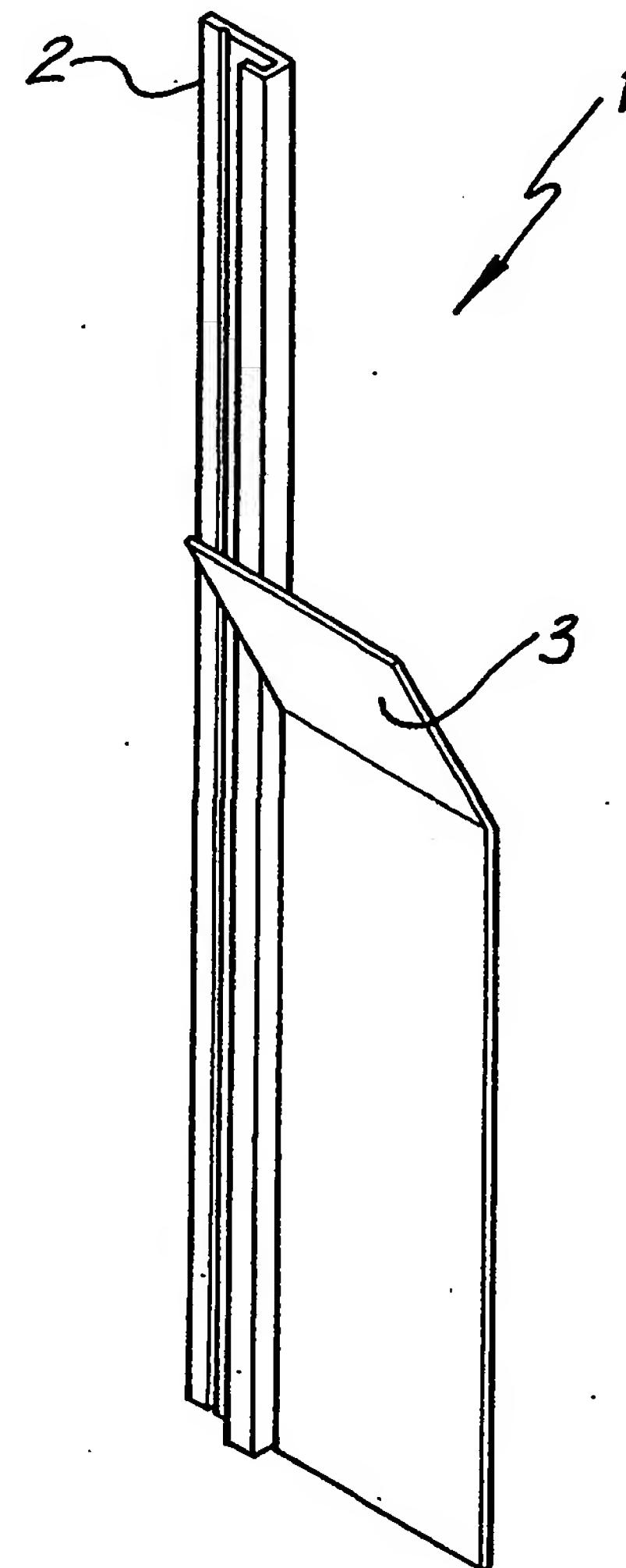


FIG. 3

2/12

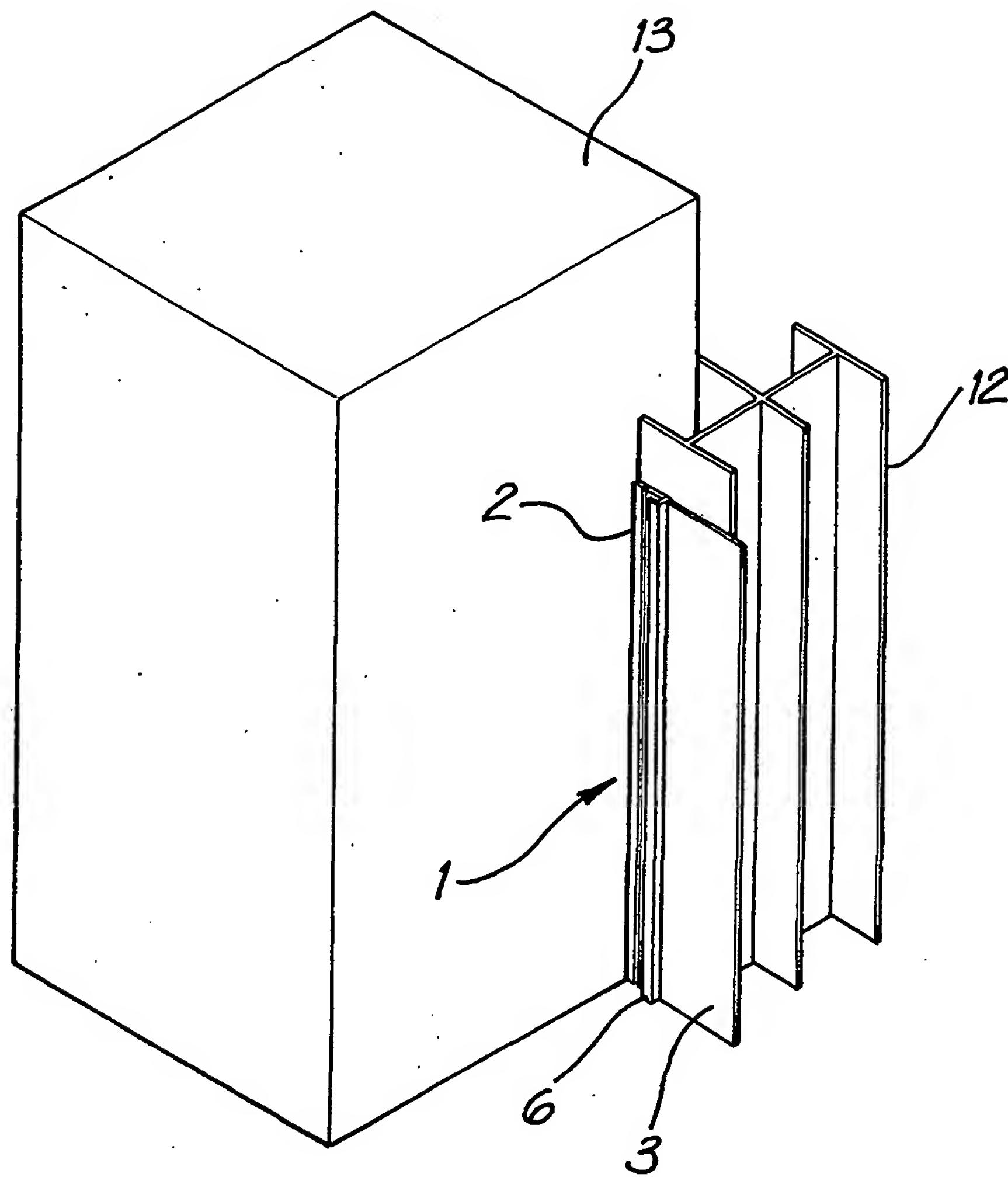


FIG. 4

3/12

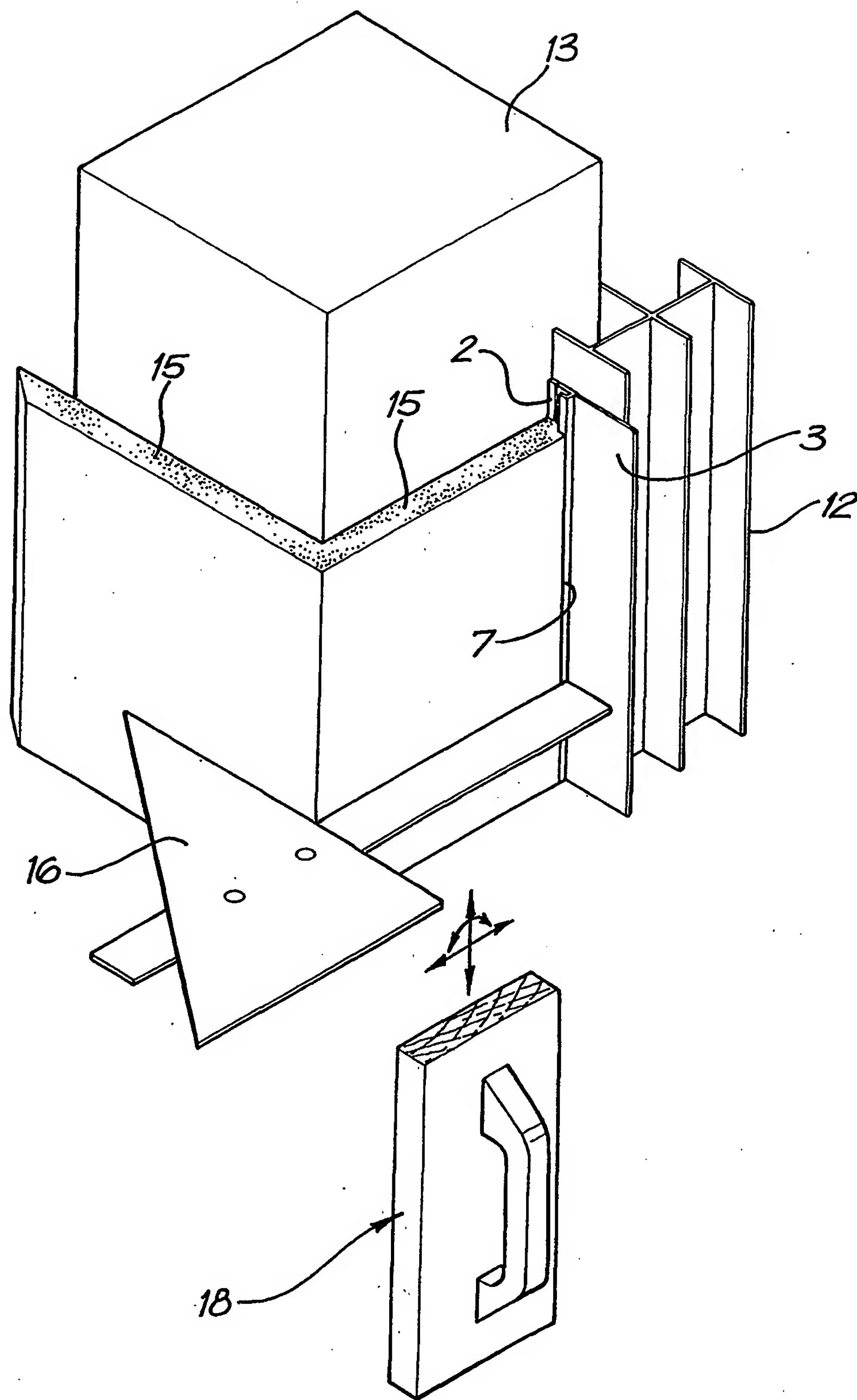


FIG. 5

4/12

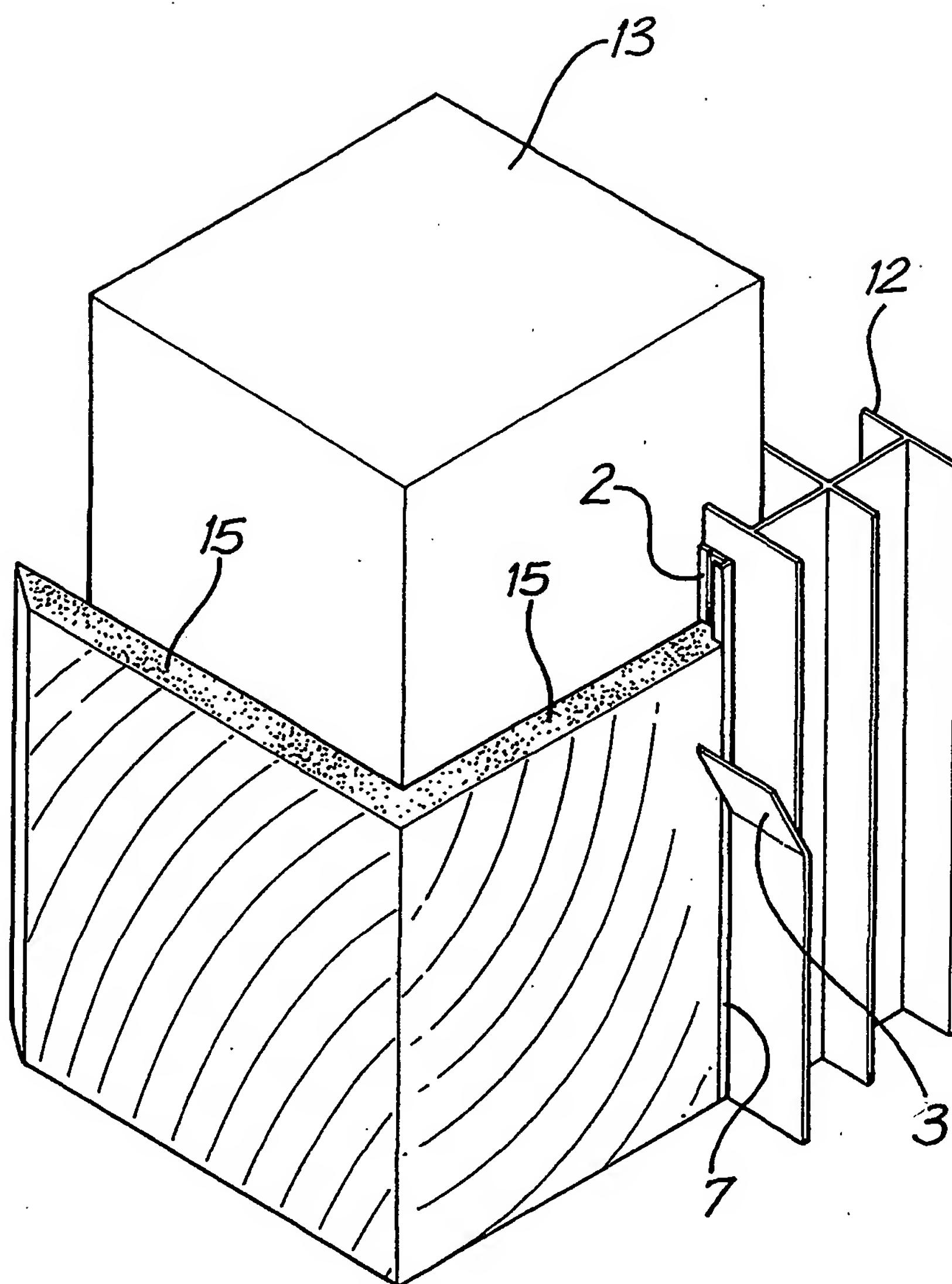


FIG. 6

5/12

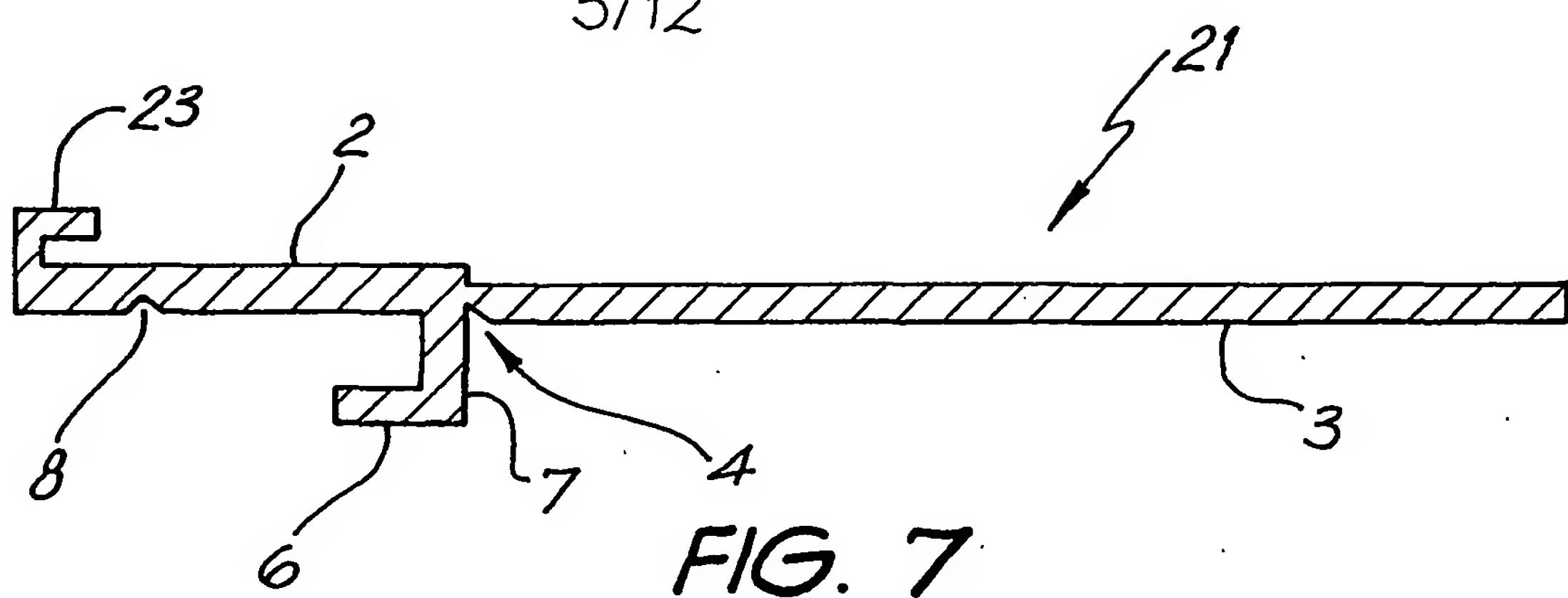


FIG. 7

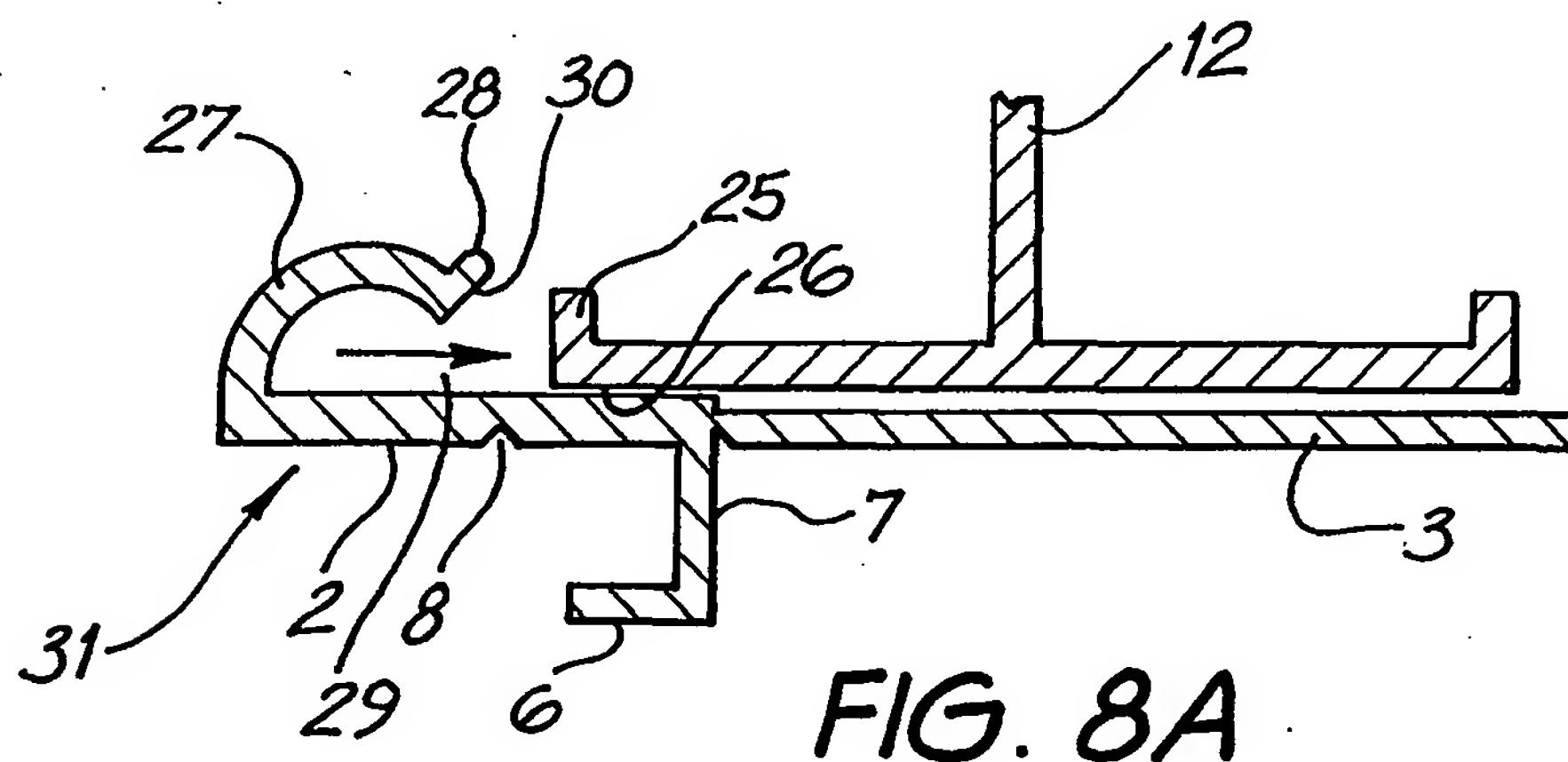


FIG. 8A

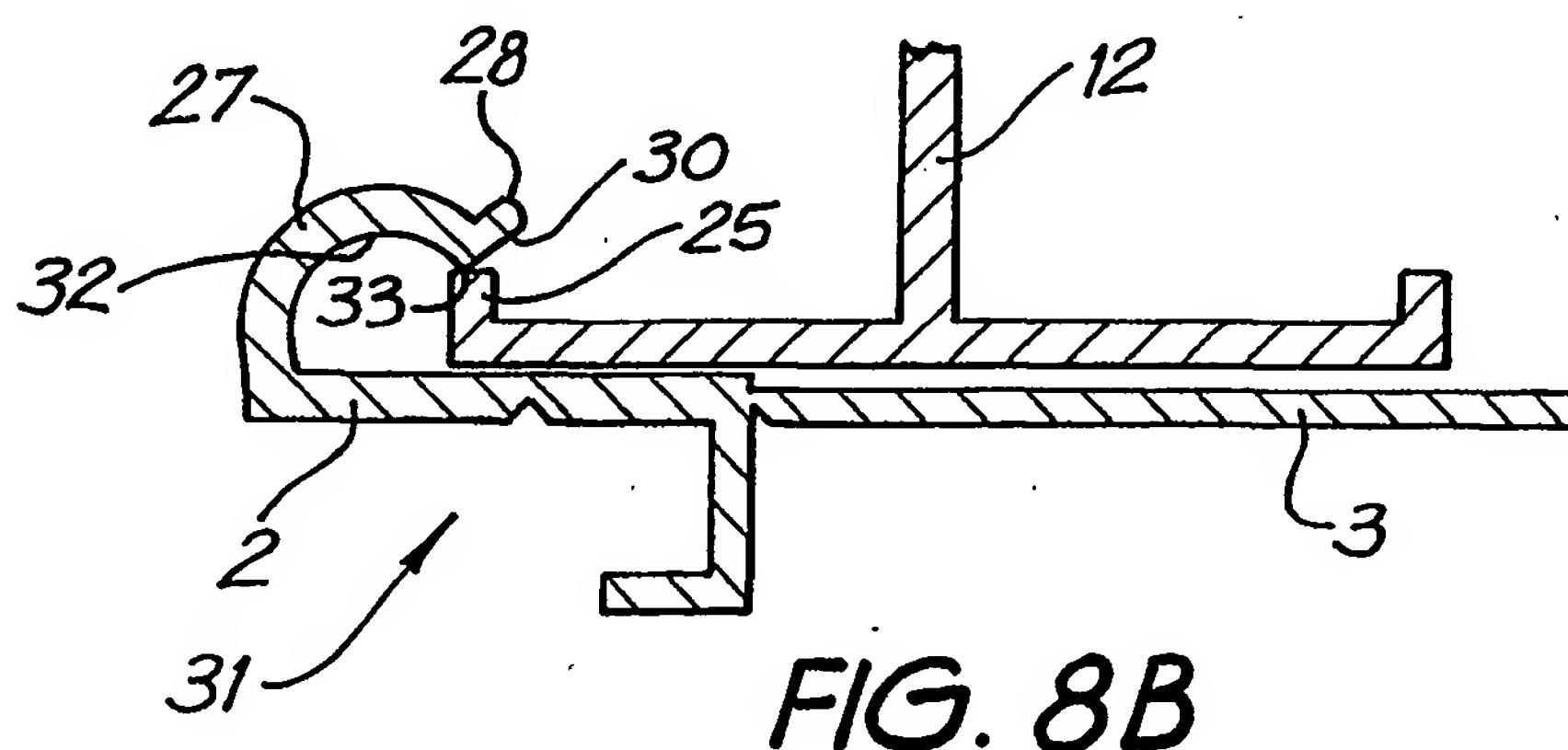


FIG. 8B

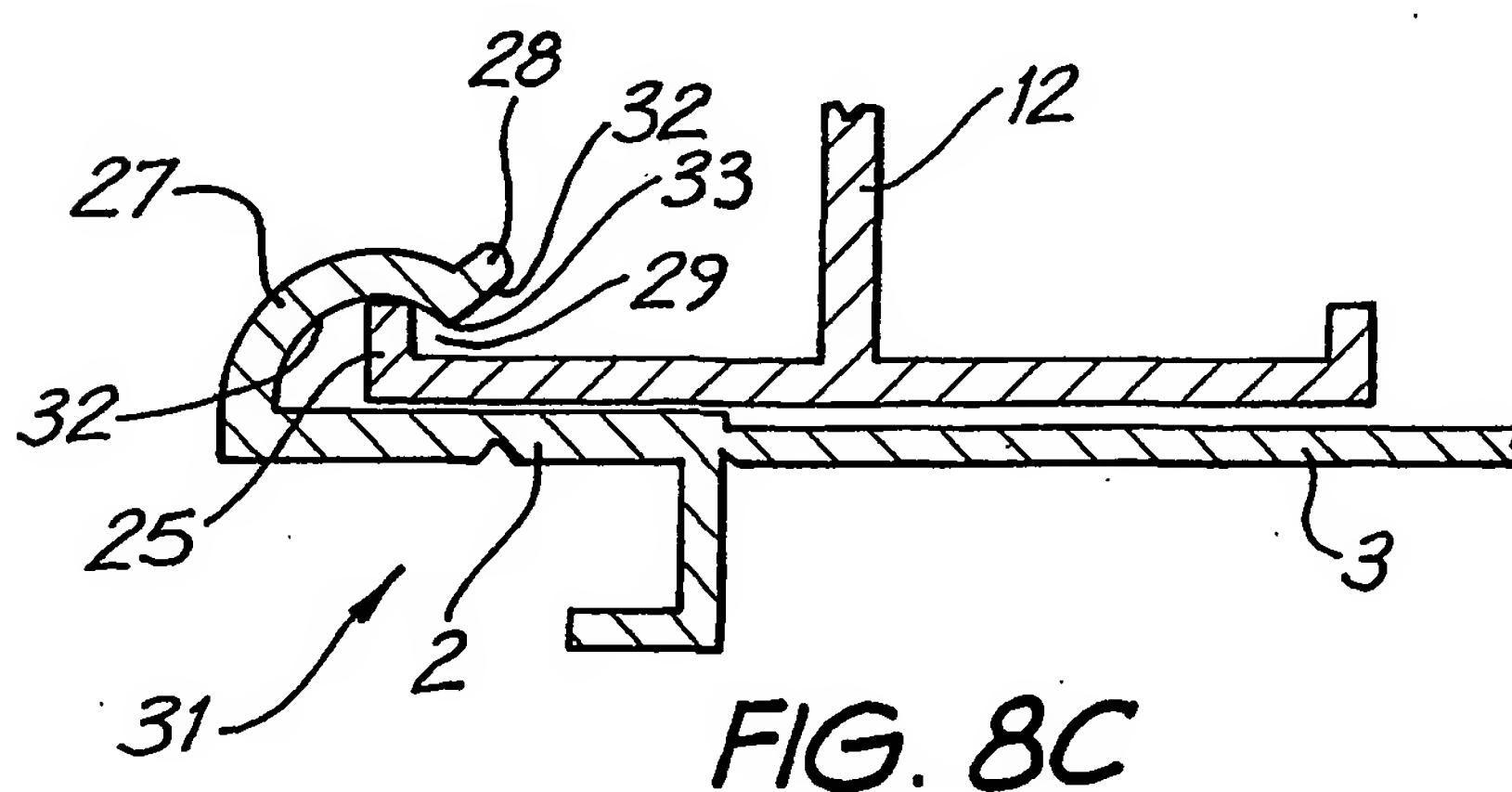
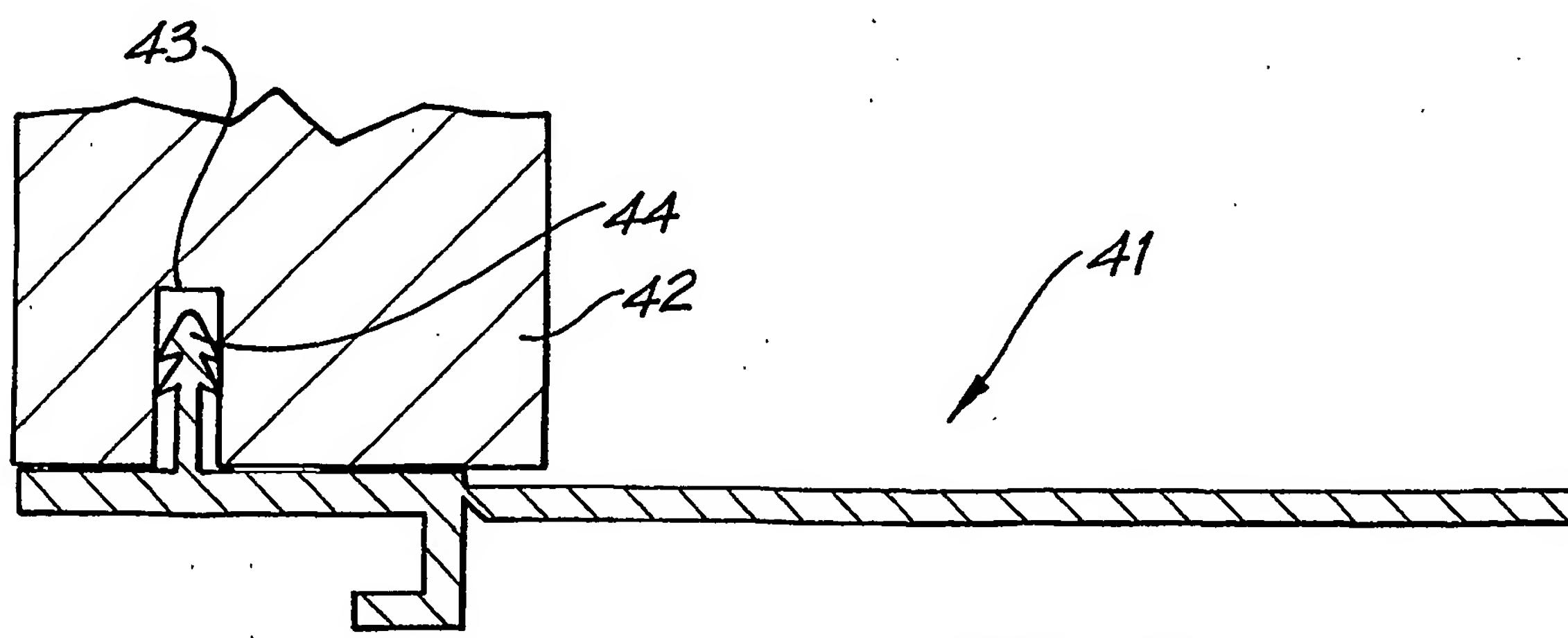
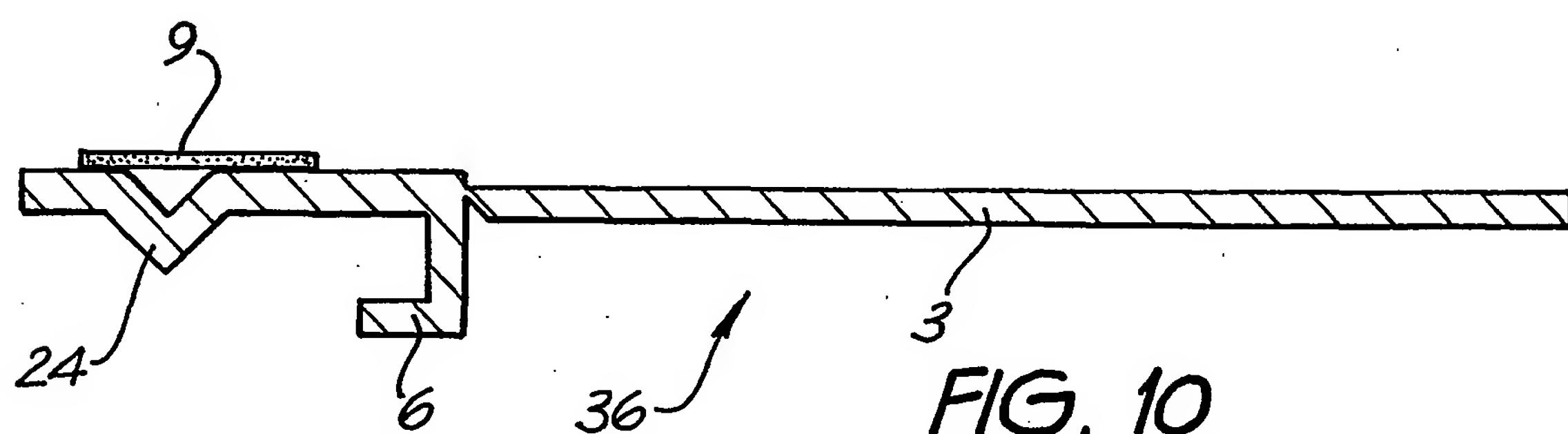
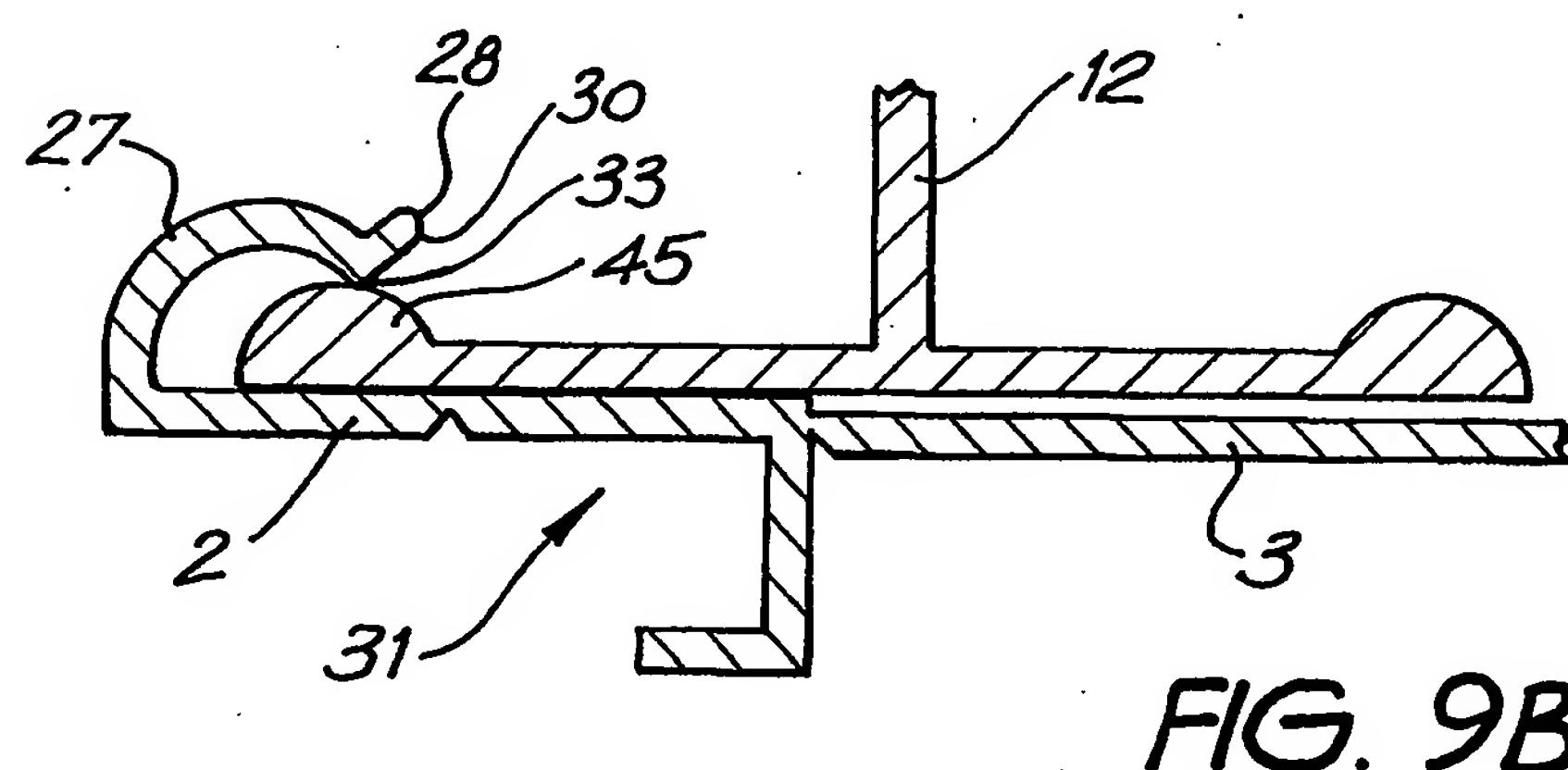
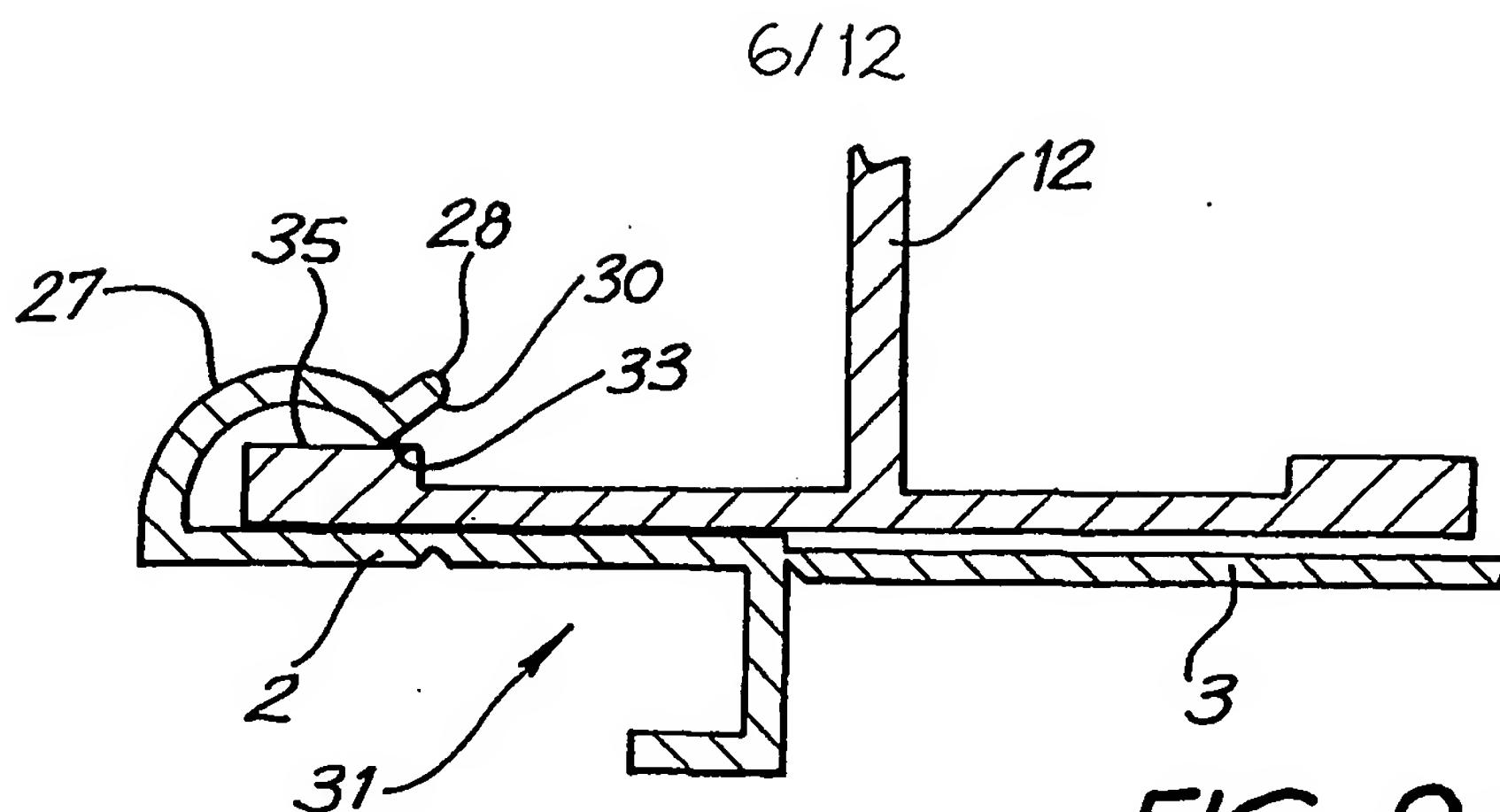


FIG. 8C



7/12

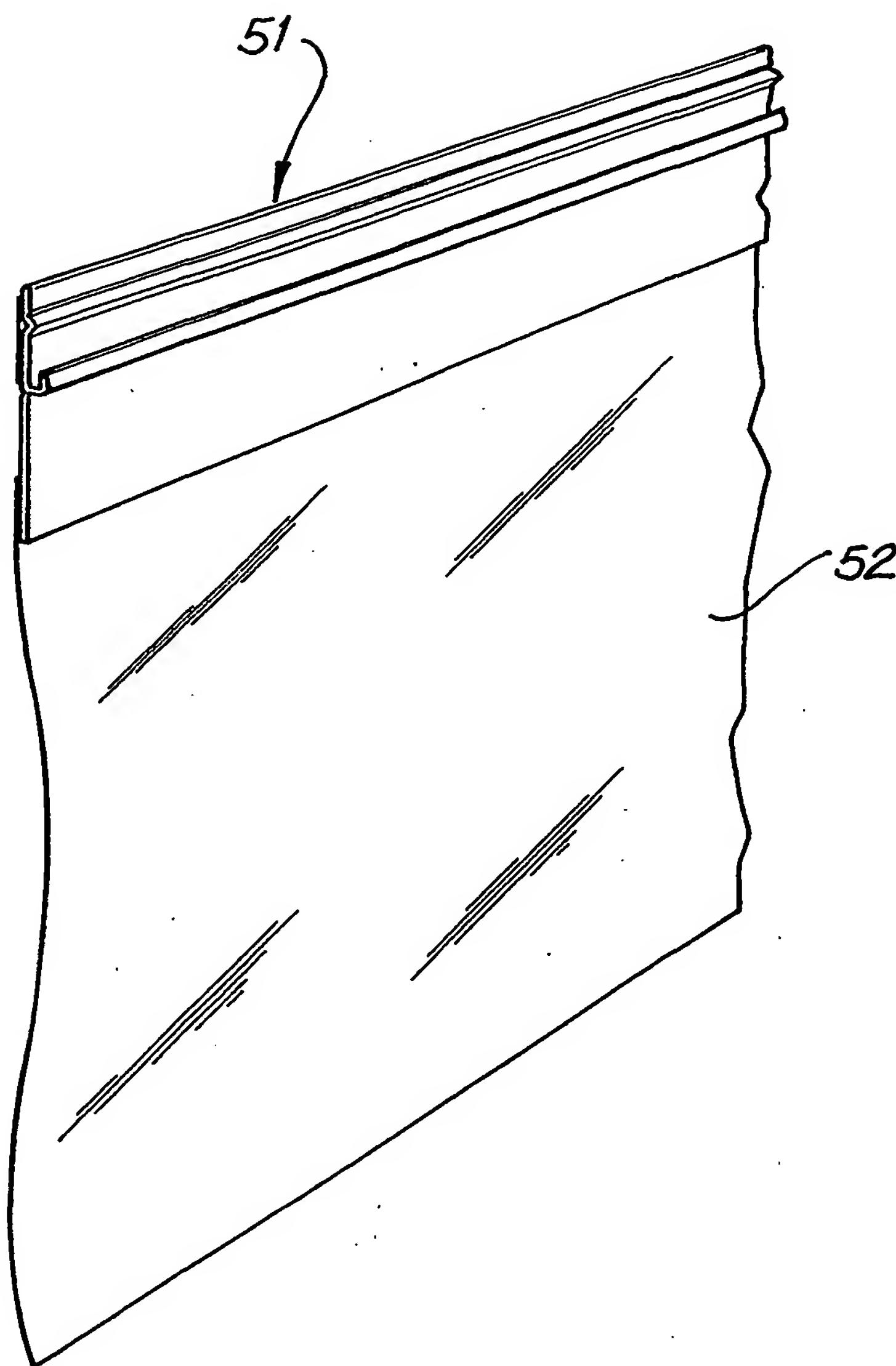
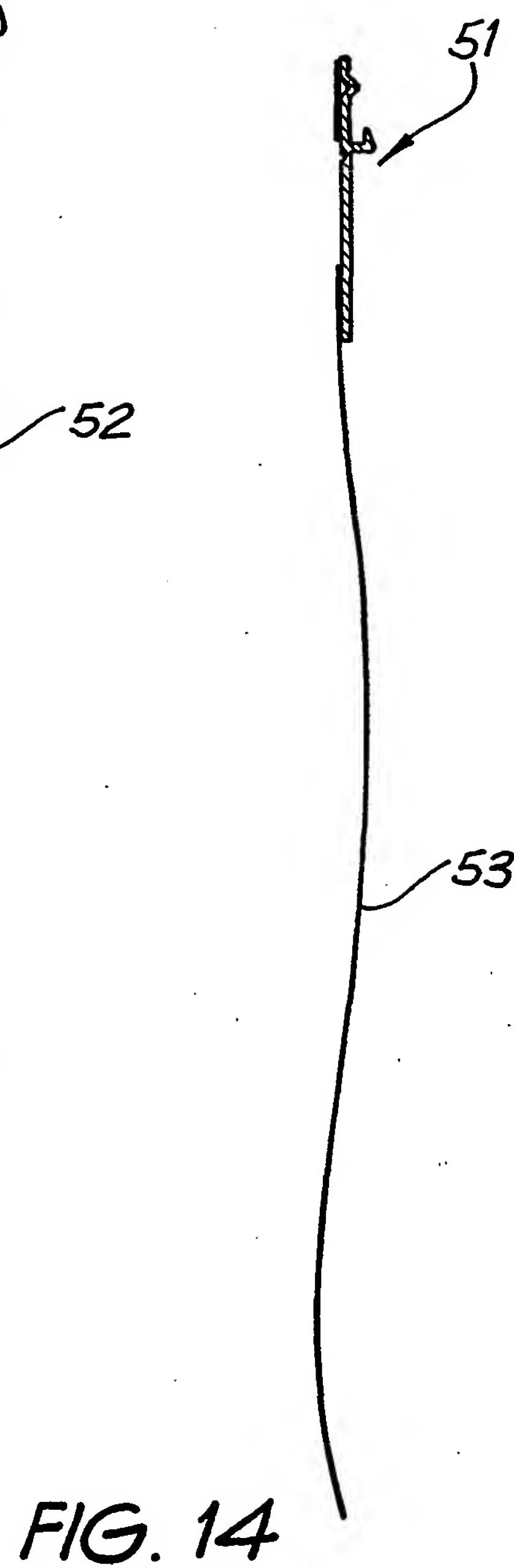
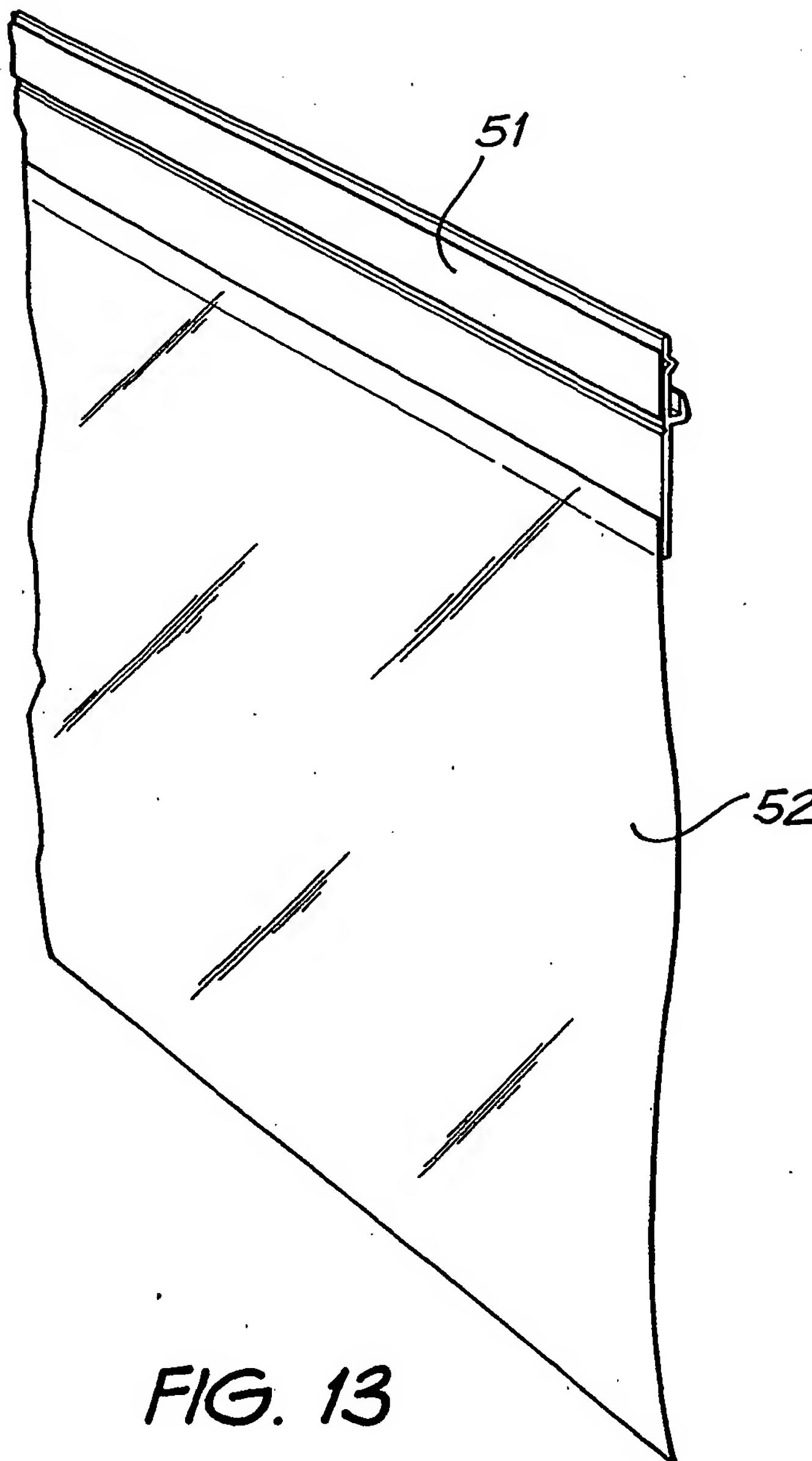


FIG. 12

8/12



9/12

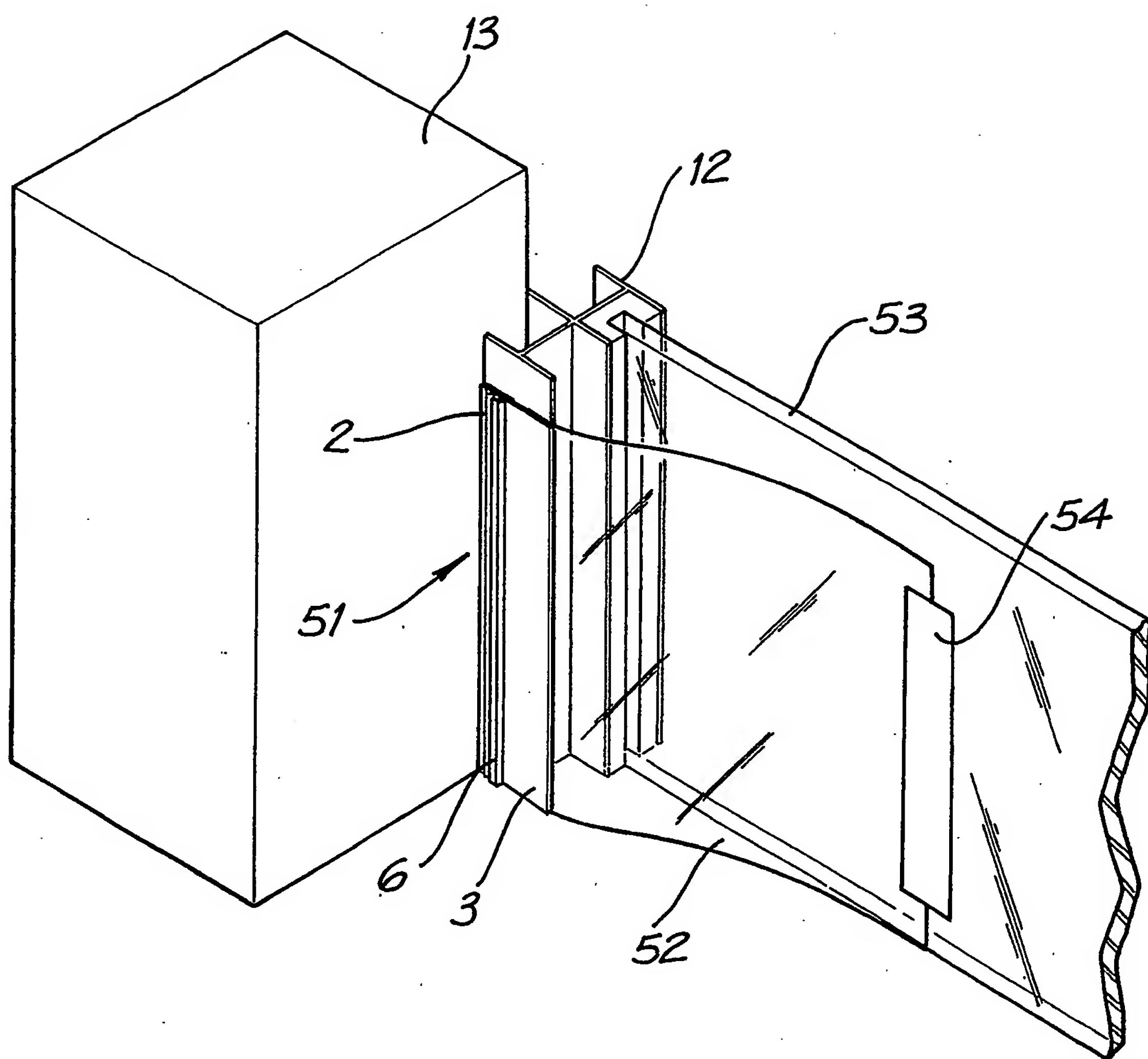


FIG. 15

10/12

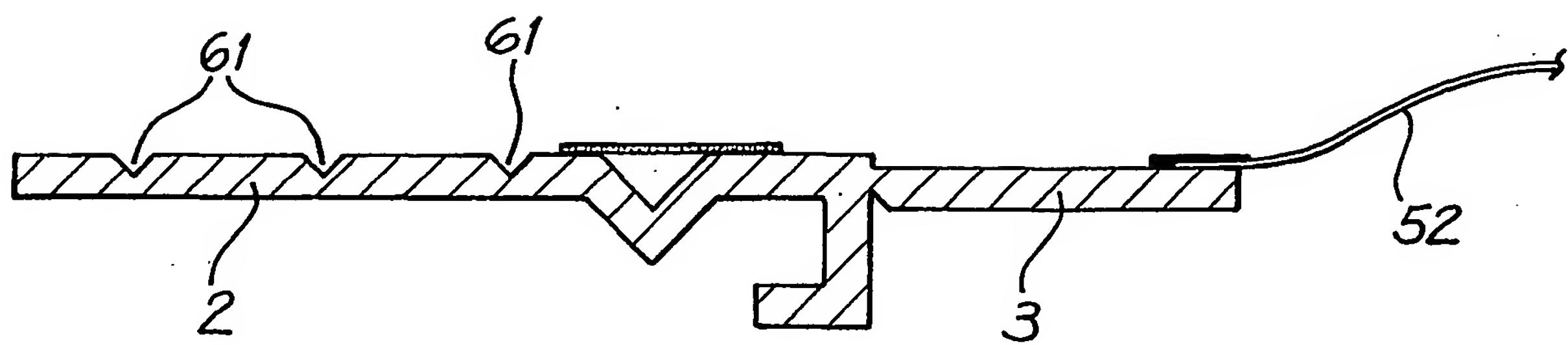


FIG. 16

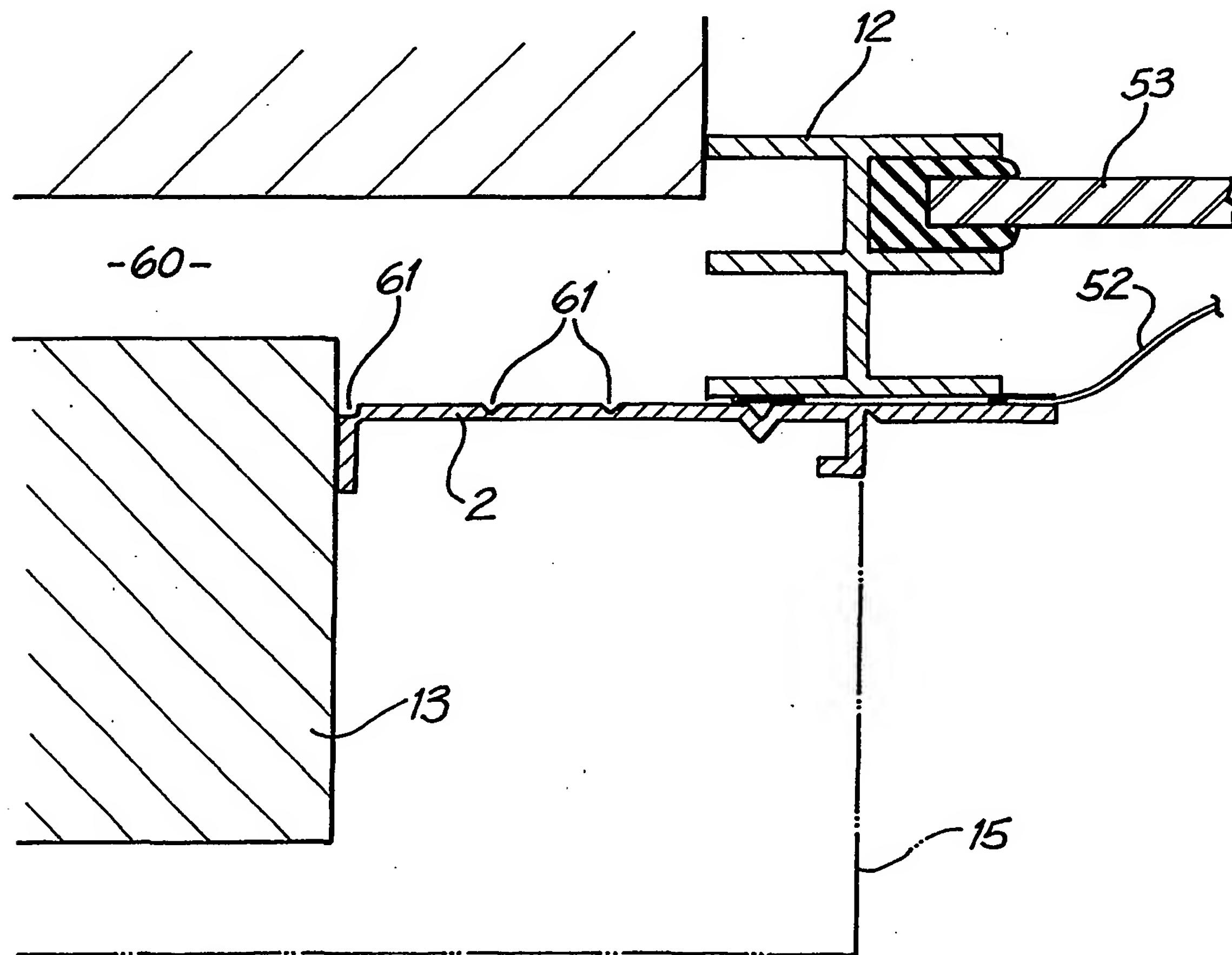


FIG. 17

11/12

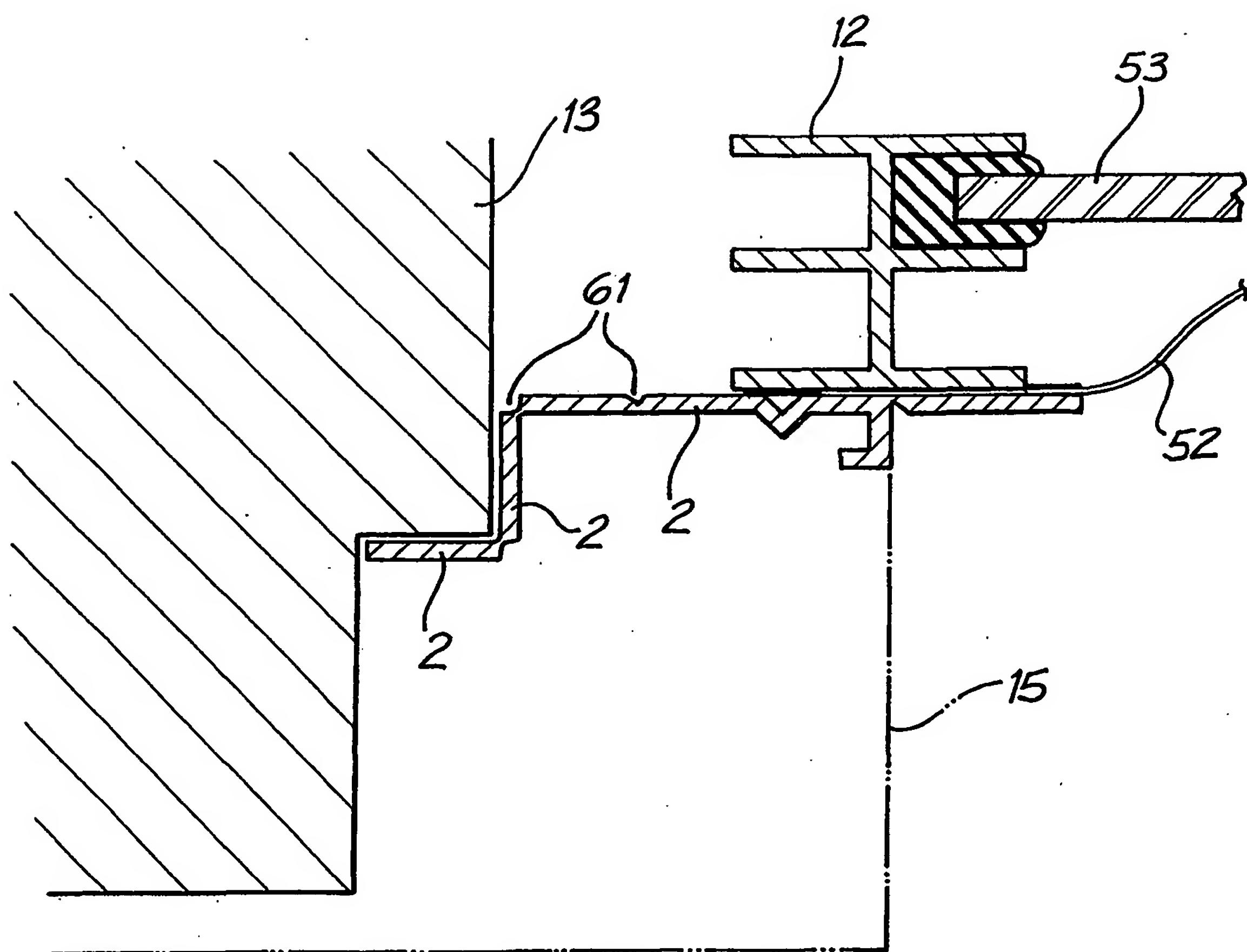


FIG. 18

12/12

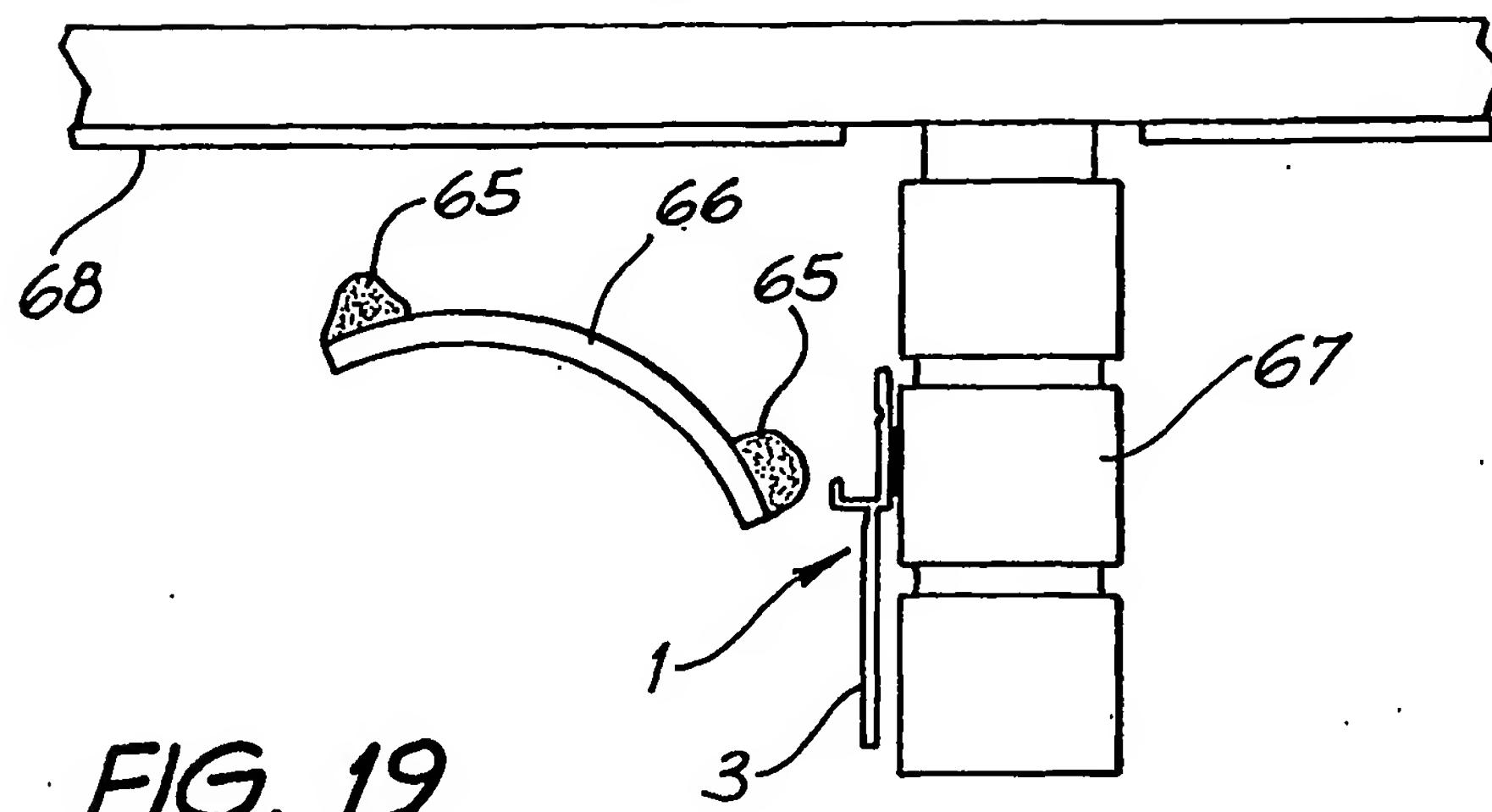


FIG. 19

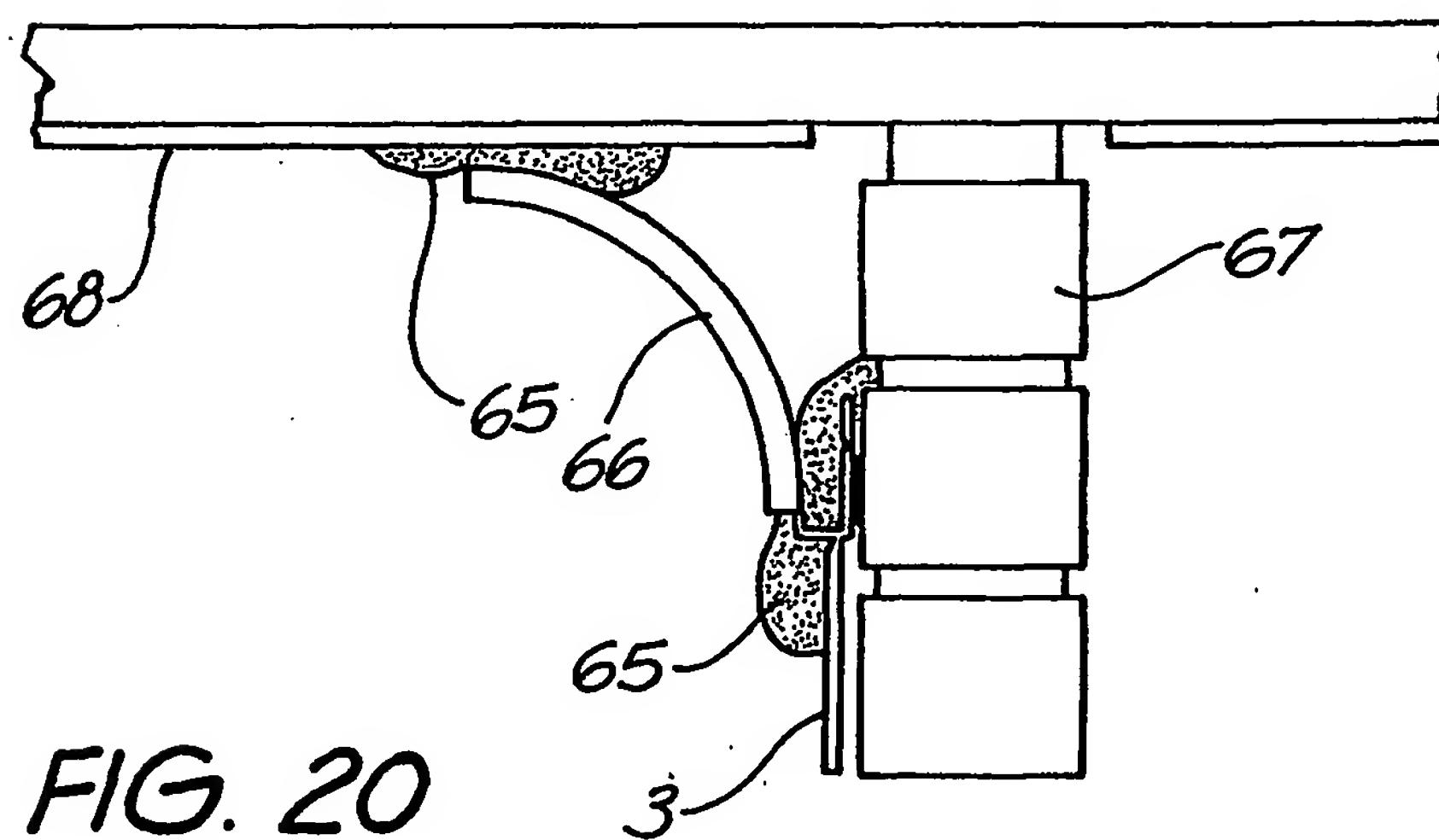


FIG. 20

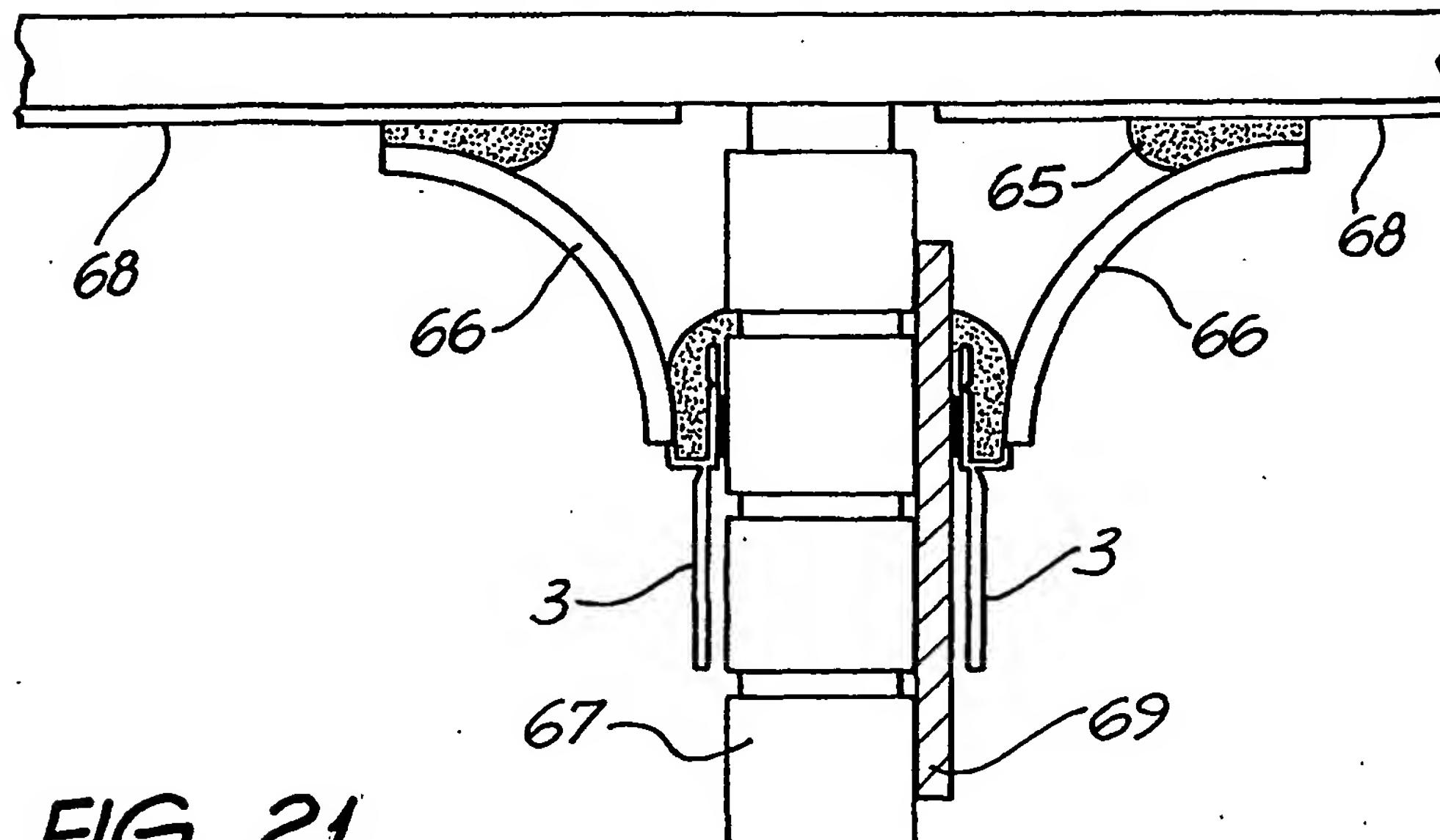


FIG. 21

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU01/01413

**A. CLASSIFICATION OF SUBJECT MATTER**

Int. Cl.?: E04F 21/04, 19/02

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

REFER ELECTRONIC DATABASE CONSULTED BELOW

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

AU: IPC E04F 21/04, 19/02

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

DWPI &amp; keywords: E04F, E06B, E06G, guid, mask, cover, screen, templat, shield, protect, border, edg, strip, fascis, band, tape, taping, ribbon, render, paint, coat, layer, plaster, cement, stucco, veneer, etc.

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5791116 A (SKINTZIS) 11 August 1998 See figures.	
A	DE 4119560 C1 (HELMUT WEBER BAUPROFILE UND ZUBEHOR VERTRIEBS GmbH) 13 June 1991 See figures.	
X	EP 318045 B1 (BRAUN) 31 May 1989 See figures.	1,2,6,7,10

Further documents are listed in the continuation of Box C     See patent family annex

* Special categories of cited documents:		
"A" document defining the general state of the art which is not considered to be of particular relevance	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent but published on or after the international filing date	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means		document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	"&"	

Date of the actual completion of the international search  
9 January 2002

Date of mailing of the international search report 11 JAN 2002

Name and mailing address of the ISA/AU  
AUSTRALIAN PATENT OFFICE  
PO BOX 200, WODEN ACT 2606, AUSTRALIA  
E-mail address: pct@ipaaustralia.gov.au  
Facsimile No. (02) 6285 3929

Authorized officer

Jon MILLS

Telephone No : (02) 6283 2113

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU01/01413

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	AU 63677/98 A (TRIM-TEX, INC) 5 November 1998 See figures.	1,3,6,10
X	DE 4205927 C1 (BRAUN) 19 August 1993 See figures.	1,2,6,10
X	DE 4229080 A1 (BRAUN) 10 March 1994 See figures.	1,2,6,7,10

**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

International application No.  
**PCT/AU01/01413**

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report		Patent Family Member			
US	5791116	NIL			
DE	4119560	NIL			
EP	318045	NIL			
AU	63667/98	NIL			
DE	4205927	EP 628121	US 5671571	WO 93/17204	
DE	4229080	WO 94/05886			

END OF ANNEX

**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record.**

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

**BLACK BORDERS**

**IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**

**FADED TEXT OR DRAWING**

**BLURRED OR ILLEGIBLE TEXT OR DRAWING**

**SKEWED/SLANTED IMAGES**

**COLOR OR BLACK AND WHITE PHOTOGRAPHS**

**GRAY SCALE DOCUMENTS**

**LINES OR MARKS ON ORIGINAL DOCUMENT**

**REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**

**OTHER:** \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.**